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The format and information of the 1963 bulletin is similar to the 1962 bulletin. Academically talented sophomore, junior and senior high school students were selected to participate in "Operation Future." Parents, teachers, and students received the following: individual counseling interviews to discuss future plans over a two or a three-year period, aptitude and ability testing, group seminars and discussions related to career information, scholarships and loans, an opportunity to visit college and university classes and to talk to professors, and tangible evidence that others are interested and willing to help them better their education and careers. After an orientation program, the student selected the lectures and group sessions he wanted to attend. Recommendations included: an increased emphasis on encouraging students to apply for scholarships, increased attention to the learning processes, the use of new media, the use of new practices in the classroom, continued research related to financing an education, the need for vocational and technical education and increased curriculum evaluation.																						
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"OPERATION FUTURE"

**A REPORT OF RESEARCH THROUGH SERVICE TO THE ACADEMICALLY
SUPERIOR HIGH SCHOOL STUDENTS IN NEW MEXICO**

by

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Director of Guidance & Pupil Personnel Services**

and

**W. G. Mayhon
Guidance Consultant**

**New Mexico
Department of Education
Santa Fe**

1963

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INTRODUCTION

"Operation Future" is a program for selected superior secondary school students in New Mexico. The research program was carried out by the staff of the Guidance and Pupil Personnel Services Division of the State Department of Education from 1960 to 1963. The staff of this Division has worked closely with the high school principals, teachers, and counselors of students participating in the program.

Special acknowledgement is made to George P. White, Chief of the Instructional Services Division in the State Department of Education, for his assistance in this program. We extend special thanks to the principals, counselors, teachers, and parents of students participating in "Operation Future" for their excellent cooperation during the program, and to the University of New Mexico and to New Mexico State University for extending their facilities on campus to the students.

The counselors who worked with the students during "Operation Future" are extended a special thanks for all their efforts. Following is a list of counselors who participated in the program. Many of them served for the three-year period of "Operation Future."

"Operation Future" would not have been possible without funds provided through Title V-A of the National Defense Education Act.

Virginia R. Keehan, Director
Guidance & Pupil Personnel Services

W. G. Mayhon
Guidance Consultant

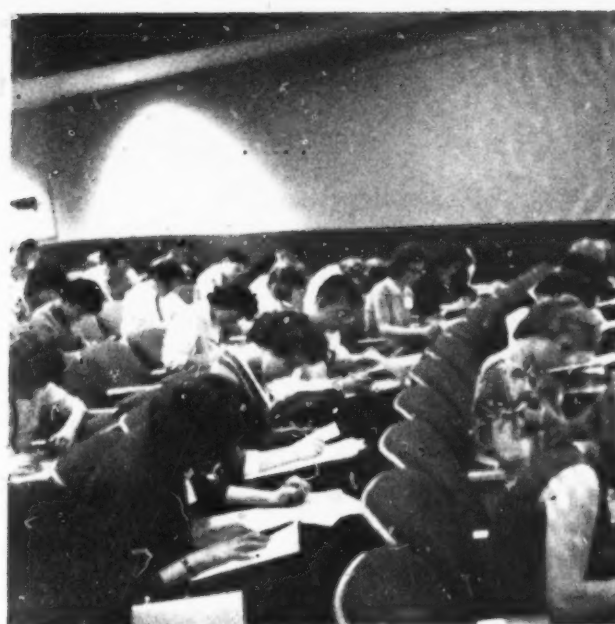
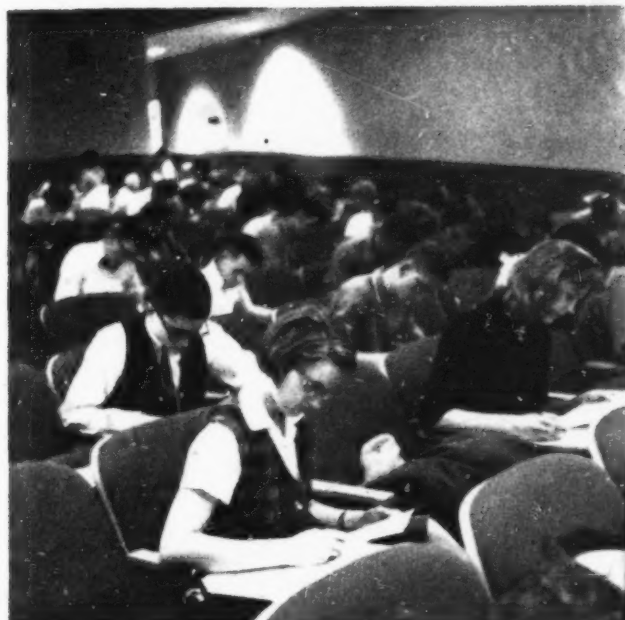
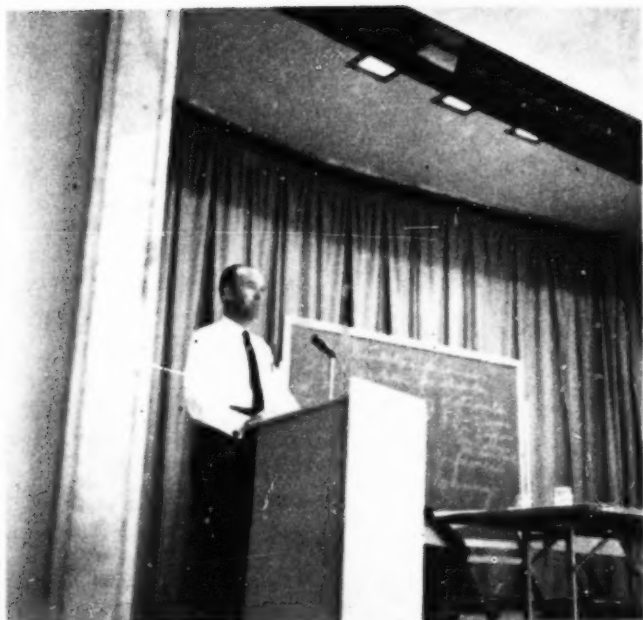
COUNSELORS PARTICIPATING IN "OPERATION FUTURE"

DURING THE THREE-YEAR PROGRAM, 1960-1963

William Aarni
Jim Adams
John Baca
Jearl Blankenship
Dr. Gladys Bookman
Clarence Botsford
Charles Burdick
Dr. Stanley Caplan
Dr. Richard Caple
Don Casados
Julio Chiaramonte
John Clem
Kenneth Collier
Dr. William Cross
Lois Daugherty
Richard DeBlassie
Hazel Durham
Ross Easterling
Isaac Garcia
Joseph Garcia
John Gill
Patricia Ann Gill
Jack Goodner
Frank Graham
Calvin Hall
Richard Harrison
Jean Hendrickson
Willis Holmberg

Betty Huxtable
Dr. William Jamison
Dr. George Keppers
Robert Lalicker
Beatrice Law
Gwyneth Liles
Robert Loar
Ben Luck
Dr. William McDonough
Orville McFadden
Dr. Richard McKee
Rachel Melvin
Ina Miller
Dr. Roy Morgan
Julianne Papcsy
Darlene Rickard
Ronald Ruble
Virginia Sacks
Duane Smith
John Stablein
Larry Stockton
Margaret Stryker
Robert A. Swanson
Dudley Sykes
John Turner
John Uxer
Bobby Van Pelt
Carl Walker

Scenes from "Operation Future"



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CHAPTER I

"OPERATION FUTURE"

Background of the Program

Currently, there is an intense focusing of attention on the education of American youth possessing superior intellectual ability. This interest has been brought about by the realization that our great national effort to provide education for all youth has diverted us from giving sufficient heed to the superior student. This not only results in a lack of self-fulfillment on the part of the individual but also is a tremendous loss in man power and in leadership which our nation can ill afford. This is not a new problem, but because of the national focus, it has in recent years received abundant attention in books, periodicals, and was nationally recognized in 1958 with Title V-A of the National Defense Education Act. Estimates indicate that fewer than half of the best 25% of all high school graduates now graduate from college. Major definitive research on educational methods with the academically superior and the specially talented have yet to be carried out although research projects are beginning in several universities. It is the belief of this Division that attention must be given to providing greater impetus in the education of the academically superior and specially talented.

In the urban areas of the Rocky Mountain region some programs or provisions for the academically superior and specially talented

exist, but very meager, if any provisions are to be found in rural and remote areas. Throughout the region there are scattered efforts toward the education of this group. No effort is made to coordinate these various efforts or to develop planned programs. There are some instances of workshops or institutes directed toward training teachers for work with the academically superior and specially talented. Wyoming, for example, has developed a guide for elementary and secondary schools to assist in enrichment programs and is providing consultative services for areas initiating programs. Minnesota and Wisconsin have each embarked upon a state program. Other states are attempting to provide some consultative services when state or local finances permit. New Mexico does provide some programs for the superior student in selected junior and senior high schools.

Research Concerning Giftedness

The following studies are cited to emphasize the extent of studies currently being conducted on giftedness.

Giftedness wears several faces. Research is bringing each of these into bolder relief as studies uncover evidence that individuals may be gifted in various ways. A study in identification and classroom behavior of elementary school children each of whom is gifted in at least one of five different characteristics, is being conducted by F. B. Davis and G. S. Lesser of Hunter College. (See "Report on Office of Education's Cooperative Research Program," School Life,

February, 1960, pp. 18-23, William R. Carriker and William Asher.) The study deals with five basic abilities or skills which fall within what is generally defined as intelligence: space conceptualization, verbal facility, number ability, reasoning, knowledge of science. An interesting by-product impression is the possible relation between a child's personality 'type' and the test in which he scores highest.

All of which leads to the need for more research which will answer such questions as these:

Can a particular type of education aimed at developing certain aspects of a child's personality in his early years, or even in his adolescence and beyond, improve his ability to learn certain types of material?

Can the 'type' of ability the child portrays affect the manner in which he learns and the type of materials in which he expresses the most interest?

"If the answers to these questions turn out to be 'yes', we are in line for some curriculum and methodology changes indeed. Particularly, how will such evidence affect our dealings with our so-called average students?"¹

The following pages contain some excerpts from Working with Superior Students,² (Theories and Practices), a collection of selected pages presented at conferences conducted by the NCA Project on Superior

1. Green, H. Hinkson, "How Bright is Bright," The Balance Sheet, December, 1960, p. 151.

2. Witty, Paul. "Current Concepts Concerning the Superior Student." In Shertzer, Bruce. Working with Superior Students. Science Research Associates, Chicago: 1960. Pp. 25-26.

and Talented Students.

This research is cited to indicate the consideration given all aspects of the problem before establishing "Operation Future."

Terms Used to Designate Superior Pupils

Until recently, as Witty³ says, a high score on an intelligence test was the single criterion used to identify a gifted child.

In the last few years, however, new criteria have been introduced and new descriptive terms for the children identified have evolved.

Some of these terms refer to students having high potential as indicated by scores on aptitude or intelligence tests (students in a special class or school for the gifted); others refer to students demonstrating very high educational attainment (scholarship winners); others refer to the 'academically talented' students (the upper 15 or 20 per cent scholastically among secondary school students); and others refer to students having aptitude in a special area such as music or art (the talented students in the Portland, Oregon experiment).

Witty⁴ illustrates the broad concept underlying the selection of superior students in a project cooperatively undertaken by the Reed College faculty and the Portland, Oregon school officials. The project includes the intellectually gifted and academically

3. Ibid., pp. 25-26.

4. Ibid., pp. 25-26.

skillful, as well as those with high capacity in art, music, dramatics, dancing, creative writing, mechanical skill and comprehension, and social leadership. Moreover, the Reed faculty advisers to the project and the cooperating public school teachers have concentrated attention on personality characteristics such as drive, self-direction, creativity, curiosity, and some sixteen other factors. Students who rate high on these are identified as gifted, even though their scores on intelligence tests are ordinary. When identified and grouped by fields, these high school students attend seminars, many of them conducted by Reed instructors.

The "Academically Talented" Student

Currently, the needs of the potentially gifted scientist are being explored and emphasized. Several publications in the 1950's point to the neglect of promising students in the field of science. This neglect has received even greater attention since Sputnik and space travel. These articles reported that secondary school courses in science were inadequate, in both number and content, to challenge the superior student. They also observed that the high school curriculum did not seem to be challenging superior and gifted youth in other areas.

Extension and enrichment of the curriculum have been proposed as methods of providing for superior and gifted secondary school students. A conference to discuss this problem was called in Washington, D. C., in February 1958. James B. Conant, the chairman, made

the following statement:

Throughout the conference, we used the phrase, "academically talented" to refer to that 15 to 20 per cent of an age group who have the ability to study -- effectively and rewardingly -- advanced mathematics, foreign languages, physics, and chemistry. Obviously, the gifted would be included in this broader definition.⁵

Recommendations of the conference included that a comprehensive program for academically talented students be initiated in the high school. Requirements suggested for these students were:

- a) four years of English; b) four years of one modern language;
- c) one year of a physical science, and one year of a biological science; d) one year of American history, one year of history other than American, and in addition, one year of some other aspect of social science; and e) three years of mathematics.

The Program for Superior Students

Sponsored by the New Mexico Department of Education

Two members of the Department of Education visited the University of Wisconsin's laboratory for superior students prior to establishing the program in New Mexico. This laboratory provides pre-service and in-service education for those who teach and counsel youth of superior intellectual promise. All of its activities are organized on the philosophy that its existence can be justified only in terms of research that it conducts and stimulates in the

5. Conant, James B. The Identification and Education of the Academically Talented Student in the Secondary School. Washington, D. C.: National Education Association, 1958.

high schools. It attempts to demonstrate what a joint attack by a university, the public schools, and parents can accomplish in the conservation and development of human resources, specifically the identification and development of unusual potential from ninth grade through college.

After studying the program at the University of Wisconsin, the writer made a survey of the unmet needs in New Mexico relative to the superior student and listed the following unmet needs:

UNMET NEEDS IN NEW MEXICO

1. Lack of personnel, both consultative and on the job.
2. Sufficient materials and equipment.
3. Expansion of identification of the academically superior, and evaluation to include kindergarten through twelfth grade.
4. Training programs, both pre-service and in-service.
5. Expansion of care for physical needs of academically superior and specially talented..
6. Collation of information as a basis for efforts for legislative action at state level.
7. Physical arrangements or facilities in schools to take care of these children.
8. Coordination through state departments of education of existing efforts in this region.
9. Flexibility of curriculum to meet the needs of academically superior and specially talented.
10. Parent education programs.
11. Research funds
 - a) for research suited to a specific region.

- b) for evaluation of programs.
 - c) to study the psychological effects of upgrading.
 - d) to determine ways of measuring ability in all its aspects -- general ability, difference within averages of ability, special talents, capacities, creativity, achievement.
 - e) to determine methodology of teaching the academically superior and specially talented.
 - f) to establish methods of counseling with academically superior and specially talented and to provide counselors at the elementary level.
12. To provide financial assistance for special opportunities for persons involved in the program for the academically superior and specially talented. Example: seminars, personnel, etc.
13. To study methods of reaching small administrative units and remote areas.

The writer then discussed with George P. White, Chief of the Instructional Services Area of the State Department of Education, the possibility of establishing a statewide program for superior students under Title V-A of the National Defense Education Act. This program began in February of 1960 and will terminate in the fall of 1963.

CHAPTER II

"OPERATION FUTURE"

The Guidance and Pupil Personnel Services Director of the State Department of Education established a pilot program in 1960 for counseling superior students in New Mexico. Letters were sent to all school superintendents; forty-two superintendents responded to the initial inquiry. Sophomores and juniors (grades 10 and 11) were selected from the upper ten per cent of their high school class in 1960 by the faculty of their high school for the pilot program. This program consisted of additional counseling and testing, of information related to careers, of scholarship information, and of information related to the financing of education beyond high school. The program was established to carry out a continuing study of the same individual over several years. The ultimate goal was to demonstrate what can be done to conserve and develop human resources -- specifically the identification and development of unusual talent. The school faculties were asked to select students who exhibited academic potential, but who were not considering a college education or who felt they would be unable to finance higher education, and who would profit from counseling sessions.

Two centers were established for the counseling and guidance sessions. These centers were located in Albuquerque at the University

of New Mexico, and in Las Cruces at New Mexico State University. Counselors were released from colleges, universities, and public schools to serve during the two-day counseling sessions which were held in 1960-1961, 1961-1962, and 1962-1963. All expenses were paid by the State Department of Education out of Title V-A, NDEA funds, which were used to establish the pilot program. During the 1961-1962 school year, new sophomores were added to the program so that sophomores, juniors, and seniors were represented in the three-year survey. The 1960 group graduated from high school in 1962 and follow-ups are being conducted to determine how many students actually went on to college. Emphasis has been given to individual planning for education beyond high school, career plans, scholarships, and loans. Students also visited college classes, met with professors to discuss their interests and future goals, attended group sessions, and received individual counseling. Some forty specialists in counseling and guidance have served during the three-year program. The students participating in the program were accompanied by a faculty member or a parent, and some of them attended the guidance sessions. All student participants attended with the approval of parents and school.

How Superior Were These Students?

Students were selected from the upper ten per cent of their class as measured by standardized achievement tests and grades they received in subject matter areas. Each school was asked to send four students, two sophomores and two juniors, in 1960. If the

school faculty preferred to send three juniors and one sophomore, this was acceptable, and some schools did this.

Following the orientation program for students, the counselor and the student cooperatively made an individual schedule for the student to follow for the two-day session. Here the student selected the lectures and group sessions he wanted to attend. Each student took a standardized scholastic aptitude test to verify his academic potential. This information, test scores, and other data were used in counseling the student. (See Appendixes B and C for test scores.)

Schools Represented in the Program

The following high schools participated in the "Operation Future" program during 1960, 1961, and 1962:

Represented at NMSU Center

Alamogordo	Eunice
Artesia	Gadsden
Carrizozo	Hatch
Cliff	Hobbs
Cobre	Las Cruces
Deming	Silver City
Dexter	Tularosa

Represented at the UNM Center

Albuquerque	Espanola	Moriarty
Highland (Albuquerque)	Floyd	Mosquero
Manzano "	Gallup	Pecos
Rio Grande "	Jemez Springs	Quemado
Sandia "	Las Vegas City	Raton
Valley "	Las Vegas West	Ruidoso
Belen	Los Alamos	St. Mary's
Bernalillo	Los Lunas	St. Pius X
Clayton	Loretto Academy	Santa Fe
Des Moines	McCurdy	Socorro
Dulce	Menaul	Texico

On May 18, 1960, a program for parents of students participating in "Operation Future" was held in Santa Fe. This program stressed education beyond the high school. Approximately one hundred and twenty-five students and parents attended from all part of the state. The program highlight was the presentation made by Dr. C. Harold McCully from the U. S. Office of Education of the importance of planning for an education that meets the talents and abilities of youth. All of the colleges and universities in the state sent representatives to meet with parents of students. They discussed the various aspects of college life, financing an education, the loan program, and career planning with the parents. The counselors who were participating in the program were available to meet with the parents of the students assigned to them. Individual sessions were scheduled for one hour with the student and the parents. The program covered one entire day. Parents indicated that the individual counseling sessions, the scholarship information, and the presentation of college information were of great value to them.

**What Services Did "Operation Future" Offer to Students,
Teachers, and Parents?**

"Operation Future" offered to the participating students:

1. Individual counseling interviews to discuss future plans over a two or a three-year period, depending on the student's entrance into the program.
2. Aptitudes and ability testing.
3. Group seminars and discussions related to career information, scholarships and loans, selecting a college or university or advanced technical training.

4. An opportunity to meet college and university students and to participate in campus life.
5. An opportunity to visit college and university classes and to talk to professors about their career plans, interests, and goals.
6. Tangible evidence that others are interested and willing to help them better their education and careers.

The first year of the program, teachers, administrators, and parents received a letter regarding the student's tentative career choices, his aptitudes and abilities. Information was sent to each school with recommendations from the counselor regarding the student. Since the writing of individual letters became such a formidable task, it was discontinued the second and third years of the program. However, a letter was sent to all college and university deans of schools selected by the seniors as possible entrance choices indicating the ability of the student and requesting that these students be considered for scholarships. This service will continue until all students in the program have graduated. Letters of recommendation have also been sent upon the request of the students to college admission officers. Pamphlets and materials have been sent to administrators regarding superior students.

Where are the 1962 Graduates?

A follow-up study of the 1962 graduates was completed in the fall of 1962. The following tables show what the graduates of the 1962

school year are doing at this time. Table I shows the students from the southern part of the state who attended the program as juniors and as seniors. Table II shows the students from the northern part of the state who participated in "Operation Future" as juniors and as seniors. The University of New Mexico was the center for the group from the northern section of the state, and New Mexico State University was the center for the southern half of the state.

A total of 104 students participated in the program for two years and graduated in 1962. There were 59 girls and 45 boys recommended by their faculties in 1960 for "Operation Future." Of the total, it is certain that 64 of these students were offered scholarships, 21 students did not receive scholarships but are attending college. Sixty-six students will graduate in 1963 having participated for three years. These students will also be included in the follow-up.

RESULTS OF THE SENIOR FOLLOW-UP, 1962

- One hundred and four students graduated in June, 1962, after attending "Operation Future" during their junior and senior years.
- Forty-five boys + 59 girls = 104 students.
- Eighty-four students or 81% are now in college. (See Tables I and II).
- Fourteen students or 13% are not attending college.
- Six students or 6% transferred out of state. It is not

TABLE I

$M=12$
 $F=18$

TABLE II
STUDENTS ATTENDING UNIVERSITY OF NEW MEXICO CENTER
1962 SENIOR FOLLOW-UP

No.	Male Female	High School Attended	Attending College Yes -- No	Name of College	Major	Received Scholarship Yes -- No	Accepted Scholarship Yes -- No	Present Status	Reason For Not Attending College	Married Yes - No
1	M	Albuquerque*	x	U. of New Mexico	Engineering	x	x			x
2	F	Albuquerque	x	U. of New Mexico	Medicine	x	x			x
3	F	Highland*	x	U. of Miami, Ohio		x	x			x
4	F	Highland	x	New Mexico State U.			x			x
5	F	Highland	x	Antioch	English	x	x			x
6	M	Highland	x	Stanford University	Math-Science		x			x
7	M	Manzano*	x	Stanford University		x	x			x
8	M	Rio Grande*	x	U. of New Mexico			x			x
9	M	Rio Grande	x	U. of New Mexico	Engineering	x	x			x
10	M	Sandia*	x	Calif. Insti. of Tech.	Chemistry	x	x			x
11	M	Valley*	x	Pomona College	Humanities	x	x			x
12	M	Valley						Retail clerk	Not ready	x
13	M	Belen	x	New Mexico State U.	Civil Engineering		x			x
14	M	Belen	x	New Mexico State U.	Civil Engineering	x	x			x
15	M	Belen	x	New Mexico State U.	Biology		x			x
16	F	Bernalillo					x	Housewife		x
17	F	Clayton	x	Gonzaga University	Nursing	x		x		x
18	F	Des Moines	x	U. of New Mexico	Medicine	x	x			x
19	F	Des Moines					x	Housewife		x
20	F	Dulce	x	St. Joseph's College	Education	x	x			x
21	F	Dulce	x	U. of New Mexico	Law	x	x			x
22	M	Espanola	x	N. Mex. Insti. M. & T.		x	x			x
23	F	Espanola				x		Housewife		x
24	F	Floyd	x	Eastern New Mexico U.						x
25	M	Floyd	x	Eastern New Mexico U.						x
26	M	Gallup	x	New Mexico State U.	Chemical Eng.	x	x			x
27	F	Gallup	x	Colorado College	English & History		x			x
28	M	Gallup	x	U. of New Mexico	Medicine		x			x
29	F	Gallup	x	U. of New Mexico	Music	x	x			x
30	M	Grants	x	U. of New Mexico			x			x
31	M	Jemez Springs	x	St. Joseph's College	Physical Education	x	x			x
32	F	Jemez Springs				x	x (9-'63)	Housewife		x
33	F	Jemez Springs	x	Albuq. Beauty School	Beautician		x			x
34	M	Las Vegas West	x	N. Mex. Highlands U.		x	x	Army (1963)**		x
35	M	Las Vegas West	x	N. Mex. Highlands U.		x	x			x
36	M	Las Vegas West	x	N. Mex. Highlands U.			x			x
37	F	Loretto Academy	x	N. Mex. Western College			x			x
38	F	Loretto Academy					x	Employed	Financial	x
39	F	Los Alamos	x	U. of New Mexico	Languages		x			x
40	F	Los Alamos	x	College of Wooster, Ohio		x		x		x
41	F	Los Lunas					x	Employed	Financial	x
42	M	Los Lunas	x	St. Joseph's College		x	x			x
43	F	Los Lunas	x	U. of New Mexico		x	x			x
44	F	Menaul*	x	U. of New Mexico			x			x
45	F	Mosquero				x		Housewife		x
46	F	Mosquero	x	Okla. Baptist University			x			x
47	F	McCurdy	x	New Mexico State U.	Mathematics		x			x
48	F	McCurdy	x	New Mexico State U.	Nursing		x			x
49	M	Pecos	x	St. Michael's College	Liberal Arts		x			x
50	M	Quemado					x	Retail clerk		x
51	F	Quemado	x					Housewife		x
52	F	Raton	x	University of Arizona	Languages	x		x		x
53	F	Raton	x	New Mexico State U.	Music	x	x			x
54	F	Raton	x	Colorado College		x	x			x
55	M	Raton	x	U. of New Mexico	Engineering	x	x			x
56	M	Ruidoso	x	Texas Tech. College	Accounting	x		x		x
57	F	St. Mary's*	x	U. of New Mexico	Education		x			x
58	M	St. Mary's	x	U. of New Mexico	English	x	x			x
59	M	St. Pius X*	x	U. of New Mexico	Physics		x			x
60	F	St. Pius X	x	U. of New Mexico	Languages		x			x
61	M	St. Pius X	x	U. of New Mexico	Engineering		x			x
62	F	Santa Fe	x	Eastern New Mexico U.	Business Admin.	x		x		x
63	M	Santa Fe	x	U. of New Mexico	Engineering	x	x			x
64	F	Santa Fe	x	U. of New Mexico	Elementary Edu.	x	x			x
65	F	Socorro	x	Reed College, Portland	Chemistry	x	x			x
66	M	Socorro	x	Occidental College, Calif.	Math-Science	x	x			x
67	M	Texico	x	N. Mex. Insti. M. & T.	Engineering	x	x			x
68	F	Texico	x	Eastern New Mexico U.	Home Economics	x	x			x
69	F	Bernalillo		Transferred out of state						
70	F	Highland*		Transferred out of state						
71	F	Los Lunas		Transferred to Australia						
72	M	Ruidoso		Transferred out of state						
73	F	Sandia*		Transferred out of state						
74	M	Santa Fe		Transferred out of state						
TOTAL	M=33 F=41		57 11	6 Transferred		40 26	32 8			8 60

* Located in Albuquerque, New Mexico
** Left College 2nd Semester, 1963

known if they are attending any institution of higher education.

- Thirty-nine boys are in college - two are married.
 - One boy is in the Navy.
 - One boy did not attend college because he felt he lacked the background.
 - Two boys transferred out of state.
 - Two boys are employed.
-
- Forty-five girls are attending college - one has married and plans to leave school at the second semester.
 - Seven girls are married.
 - Two girls are employed.
 - Four girls transferred out of state and their present status is unknown.
 - One girl did not attend college because of illness.

Scholarships

- Sixty-four students were offered scholarships.
- Fifty-six students accepted scholarships.
- One student accepted an appointment to West Point, and one to the Air Force Academy.
- Eight students did not accept the scholarships, however, five of these students are attending college.
- Twenty-one students did not receive scholarships but are attending college.
- Two students now employed did not attend college due to financial difficulties.

- Three students are in college but it is not known if they received scholarships.
- Number of married students:
 Eleven students are married, three boys and eight girls.
 Eighty-seven students are single.
- Of three, the marital status is unknown.

What Was Learned About Superior Students?

The students participating in the program were bright individuals, interested in using their talents and abilities, and seeking information on careers, scholarships, and finance. The first year of the program it was felt that students did not possess a sufficient background on the man power demands of the changing times, career opportunities, college and university information, or how to plan for education beyond high school in a very realistic manner. It is the feeling of the counselors that tremendous growth has taken place within the individual, not only in the maturation process but in knowledge of self, the world of work, and in taking definite steps toward making a broad career choice related to interests and abilities. Of the 154 students counseled in 1961, 60 selected broad career areas, 78 made tentative selections, and 16 were undecided. The counselors felt that 119 of these choices were realistic in relation to the student's capabilities and motivation. One hundred and thirty-six students expressed a desire to attend college, one to enter a technical school, and

one to enter the Armed Forces, which he subsequently did. One hundred and twenty-three expressed a desire to enter professional occupations. Only twelve of these students counseled in 1961 indicated a need for financial assistance.

Of the 109 students counseled in 1962 for the first time, 44 made broad career choices, 59 had a general idea of the broad area in which they were interested, and six had no particular choices. Ninety-nine of these students expressed a desire to attend colleges, ten to enter technical schools, one to enter the Armed Forces, and one had no immediate goal. Eighty-eight of the counselees expressed a desire to enter a professional occupation.

Some Interesting Statistics Regarding "Operation Future"

1. Attendance at "Operation Future" of 270 students:
 - a. Eighty-six students attended one two-day session (New students -- in 1962, 140 students attended two two-day sessions, 44 students attended three two-day sessions.)
 - b. Collectively, the 270 students were counseled individually 498 times by either the same counselor or another assigned counselor.
2. Were these students college material? The counselors indicated that:
 - a. Two hundred and fifty-four students or 93% were college material.
 - b. Four students or 2% were evaluated as college material with reservation.
 - c. One student or .05% was evaluated as not being college material.

- d. Eleven students or 4.5% were evaluated as doubtful college material.
- 3. Number selecting a vocational career (other than college):
 - a. Twenty-one students or 8% of the 270 students indicated they would like to enter a vocational field.
- 4. Number desiring to attend college:
 - a. Of the 270 students, 249 or 92% expressed a desire to attend college.
 - b. Of the 249 students who desired to attend college, the number indicating a need for financial assistance was 193 students or 78% .
 - c. Of the 249 students who desired to attend college, 35 or 14% indicated that they would be financed by self, family, or U. S. Government agencies, e.g., Bureau of Indian Affairs, and the Armed Forces Academies.
 - d. Of the 249 desiring to enter college, the counselors felt that 188 or 75.5% expressed a realistic choice in terms of academic ability and achievement.
- 5. What information was of the most value to students during "Operation Future?" -- In order of preference, students listed:
 - a. College and career information
 - b. Individual counseling
 - c. Scholarship information
 - d. Group discussions
 - e. Campus visitations
 - f. Assistance in making post high school plans

Over the three-year period the counselors felt that the superior students were becoming more cognizant of opportunities and more realistic in their plans. The general opinion was that high

school faculties and counselors are responsible for this improvement.

Many of the students were reticent to indicate a need for financial assistance and scholarship aid. It appears that this is a problem that many students do not face in the early years of high school, and many do not have the concept of the cost of a year in college away from home. The cost of an education as well as ways to finance an education were emphasized in both group sessions and in individual counseling conferences.

The counselors were impressed with the responsible attitude shown on the part of the students participating in the program, and their interest and zeal in gathering information.

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CHAPTER III

"OPERATION FUTURE"

Summary and Recommendations

Indications of this report are favorable for providing specific guidance for superior students. We tend to ignore our best talents on the theory that they are "smart enough to take care of themselves." However, our findings indicate that even talented students fail to make specific, realistic plans early enough. Though most of them had plans to "go to college," only a small percentage of those in the first year of "Operation Future" had even considered the hard facts of financing their college work. Very few of them had applied for scholarships or considered other methods of finance. Most had a naive faith that family and part time jobs would see them through. Much of the counseling emphasis was placed on the importance of early and realistic planning to meet the cost of attending college. This was a justified emphasis if one judges by the number of individual students (64) who were offered scholarships. This was a profitable and fortunate emphasis if one judges by the number of students (56) who accepted scholarships.

There is a need for increased emphasis on encouraging students to apply for scholarships. Many of them, especially those who most need financial help, are sensitive about it and hesitant to make

it known. Many students have no idea of the number or types of scholarships and financial aids available, or the fact that they might qualify.

Since the participants in this program amount to only one percent of the total number of graduating seniors in New Mexico, the group represents only about one-twentieth of the superior senior students for this particular year.

Even with the emphasis placed on the advantages of higher education, about twenty percent of this select group decided against further schooling. It seems valid to assume that many more would have neglected to attempt college if guidance and encouragement in this direction had not been provided.

Many of the students come from schools where there is no counselor or other person with the time or ability to give useful scholarship or college information. Moreover, most school counselors are overloaded and not able to cope with this except with generalized guidance services rather than specific measures. Therefore, we see a strong need for more effective guidance in the individual school for our talented young people by providing them specific, practical, "how to do it" advice that they can put to immediate use in making plans for higher education. Too many of them do not, at this age, feel independent enough to initiate their own plans, but will follow through with them if given a start in the right direction with a clear idea of what is necessary to achieve this goal.

This report has not attempted to deal with the all important question of what constitutes an appropriate education for superior students. However, it is a question that needs to be examined in the light of changing needs and the changing educative process.

Increasing attention must be given to the learning processes, the use of new media, and differentiated practices in the regular classroom such as individualized instruction, providing experiences in depth in a particular field, and the use of seminars for superior students and independent study.

There is a need for continued research related to financing an education, the need for vocational and technical education, for curriculum evaluation, and the experimentation with new practices and techniques in working with superior students. Research cannot be carried on without adequate financing, and there are few, if any funds available for continued study in this area. Funds for research must be included in the financing of an educational program if full value is to be received for money expended in an educational program. It is the recommendation of this Division that some funds be established for research to be conducted by the State Department of Education in cooperation with colleges, universities, and local schools.

This three-year pilot project would not have been possible without the funds made available through the National Defense Education Act of 1958, Title V-A.

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APPENDIX A

A STUDY OF REALISTIC OCCUPATIONAL CHOICES
EXPRESSED BY STUDENTS
PARTICIPATING IN "OPERATION FUTURE"

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APPENDIX A

A STUDY OF REALISTIC OCCUPATIONAL CHOICES EXPRESSED BY STUDENTS PARTICIPATING IN "OPERATION FUTURE"*

This is a study of realistic occupational choices expressed by the specially talented students from approximately thirty-eight high schools of the State of New Mexico who participated in "Operation Future" on the campus of the University of New Mexico and the campus of New Mexico State University. These students were selected for "Operation Future" by local school administrators on the basis of teacher evaluation and local test scores from the upper ten percent of their respective classes.

Statement of the Problem

It was the purpose of this study to evaluate the effectiveness of some aspects of "Operation Future" in New Mexico by:

- 1) determining the percent of participants making realistic occupational choices during their first counseling interview in 1961 in relation to
 - a) scholastic abilities as measured by the School and College Ability Test
 - b) motivation as indicated by counselors' summaries of interviews
 - c) students' desires indicated in their autobiographies

* Adapted from an unpublished paper of the same title prepared by Julio Chiaramonte, University of New Mexico, Albuquerque.

- 2) determining the percent of participants making realistic occupational choices during their second counseling interview in 1962 in relation to
 - a) scholastic abilities as measured by the School and College Ability Test
 - b) motivation as indicated by counselors' summaries of interviews
- 3) determining any significant difference that exists between the two percents.

Hypothesis

The hypothesis established was that there is no significant difference between the percent of students participating in "Operation Future" in New Mexico making realistic occupational choices during their first counseling interview in 1961 and the percent of the same students making realistic occupational choices during their second counseling interview during 1962.

Importance of the Study

"Operation Future" is important as a special educational project for young men and women who are most vital to our survival as a nation. It is, therefore, important that each and every student make a propitious occupational choice. This project molds the students' characters, encourages their dreams, inspires their hopes, and plants in them the seeds of patriotism. This project is a great aid for the state and for the nation in the proper preparation of young men and women in time of peace and in the event of hostilities.

There are several practical uses for the results of this study. It may be used to determine the effectiveness of "Operation Future" in connection with review or reinforcement of the counselor's techniques which are essential while counseling on occupational choices. The study may be used as a strong basis for planning, requesting, and justification for funds to carry on with future "Operation Futures." It may be used to stimulate growth and development of students and continued growth, and development, and additional training of participating counselors and officials. It is of vital importance for good public relations, i.e., careful liaison and planning with the parents and schools concerned. It may be used as a basis for further development and continued operations of this project.

Sample

The sample used in this study consisted of 88 students who were counseled twice, once in 1961 and once in 1962.

Results

This study revealed that:

- 1) 22 of 88 students, or 25%, made definite realistic occupational choices in 1961 during their first counseling session.
- 2) 83 students, or 94.3%, made definite realistic occupational choices in 1962 during their second counseling session. Choices were made in relation to the individual's capabilities, motivation, and by criteria defined and established locally in this study.
- 3) the critical ratio of 1.97 indicates that the

difference between the percents is significant at the 5% level of confidence.

The null hypothesis stated that there is no significant difference between the percent of students participating in "Operation Future" making realistic occupational choices during their first counseling interview in 1961 and the percent of the same students making realistic occupational choices during their second counseling interview during 1962. Results indicate that this hypothesis can be rejected.

The percentage increase in 1962 indicates growth and development in the students as a result of "Operation Future." The data suggest that students who participated in "Operation Future" have:

- 1) high motivation, high ideals, and high standards
- 2) developed a self-acceptable plan for educational and occupational life
- 3) a clear-cut perception of their needs, abilities, limitations, interests, values, drives, aspirations, achievement, and self-understanding
- 4) formulated and fixed, well-thought-out, realistic goals according to their abilities
- 5) had a tentative realistic choice at the conclusion of the first annual counseling period with professional counselors
- 6) delimited their choices in occupational goals as a result of the second annual counseling period, had a more definite educational plan, and had an appreciation and understanding of the requirements of life's work
- 7) made sound choices and decisions in connection with social, educational, and occupational aims
- 8) gained knowledge and stature and improved as a result of testing, essay writing, and benefited

from the counseling sessions and interpretation of test scores by counselors.

Conclusions

- 1) Students can be helped, through counseling and guidance, to make realistic occupational choices.
- 2) Comments from students themselves illustrate that "Operation Future" has helped them:
 - a) to develop a sense of values and adjustment to realities of life
 - b) develop social concepts and skills
 - c) realize their potential through pursuance of a sound educational program
 - d) better understand himself and in relation to others
 - e) instill an appreciation for the dignity of higher education and work while choosing life's work for which he is best suited
 - f) obtain insight and make sound adjustments
 - g) achieve an increasing degree of maturity
 - h) solve current problems and develop future plans
 - i) gain valuable, everlasting experience in the practice of making vital choices and decisions.
- 3) That "Operation Future" has helped to reduce the number of the specially talented students who might drop out of high school by making the student aware of his potentiality and of being an important person in society.
- 4) That "Operation Future" assisted the student to review his present educational and occupational interests for a profitable and self-satisfying life.

Recommendations

- 1) Continuation of "Operation Future" is recommended.

Results of this study illustrate the success of "Operation Future" as an educational endeavor which merits further attention.

- 2) That the State Department of Education make a thorough study of the benefits derived from "Operation Future" and present the results to the Legislature of the State of New Mexico with a recommendation that this educational procedure be supported.

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APPENDIX B

NEW MEXICO STATE UNIVERSITY CENTER

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APPENDIX B

"Operation Future" - March, 1962 - New Mexico State University Center
 Sophomore and Junior Scores on SCAT - (College Form - Grade 13 Norms Used)

<u>STUDENT</u>	<u>VERBAL PERCENTILE BAND</u>	<u>QUANTITATIVE PERCENTILE BAND</u>	<u>TOTAL SCORE PERCENTILE BAND</u>
*1	8-21	10-20	8-15
*2	15-31	14-31	14-20
3	7-18	29-48	16-24
*4	20-40	41-63	32-42
5	17-34	45-68	32-42
6	24-43	55-74	37-48
7	7-18	82-92	37-48
*8	28-49	55-74	42-55
*9	43-66	41-63	42-55
*10	37-60	41-63	42-55
11	28-49	55-74	48-62
*12	15-31	82-92	48-62
*13	24-43	33-55	48-62
*14	66-83	25-45	48-62
15	54-75	41-63	55-68
*16	32-54	68-87	55-68
*17	20-40	94-99	62-74
*18	49-71	60-80	62-74
19	49-71	68-87	62-74
*20	49-74	68-87	68-80
*21	37-60	82-92	68-80
*22	54-75	68-87	74-84
*23	54-75	74-91	74-84
*24	54-75	74-91	74-84
25	49-71	90-98	74-84
*26	71-86	60-80	74-84
27	43-66	55-74	74-84
28	60-78	71-90	80-87
29	75-89	68-87	84-89
30	71-86	74-91	84-89
*31	83-92	60-80	84-89
*32	89-94	48-71	84-89
*33	71-86	74-91	84-89
*34	71-86	82-92	87-92
*35	66-83	92-99	87-92
36	75-89	85-94	89-93
37	93-96	68-87	89-93
38	83-92	85-94	92-94
*39	89-94	74-91	92-94

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APPENDIX B (Cont'd)

<u>STUDENT</u>	<u>VERBAL PERCENTILE BAND</u>	<u>QUANTITATIVE PERCENTILE BAND</u>	<u>TOTAL SCORE PERCENTILE BAND</u>
40	95-98	60-80	92-94
41	86-93	82-92	92-94
42	86-93	82-92	92-94
*43	75-89	94-99.2	92-94
44	83-92	92-99	93-96
45	94-97	68-87	93-96
*46	91-95	74-91	93-96
47	91-95	82-92	94-97
*48	95-98	82-92	96-98
49	95-98	88-96	97-99
50	93-96	13-27	97-99
*51	99-99.7	92-99	97-99
52	96-99	88-96	98-99.1

* Sophomores taking the SCAT

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APPENDIX C

UNIVERSITY OF NEW MEXICO CENTER

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APPENDIX C

"Operation Future" - March, 1962 - University of New Mexico Center
 Sophomore and Junior Scores on SCAT - (College Form - Grade 13 Norms Used)

<u>STUDENT</u>	<u>VERBAL PERCENTILE BAND</u>	<u>QUANTITATIVE PERCENTILE BAND</u>	<u>TOTAL SCORE PERCENTILE BAND</u>
*1	5-15	13-27	8-15
*2	12-35	8-15	8-15
*3	0-1	45-68	14-20
*4	7-18	15-35	14-20
*5	5-15	33-55	16-24
6	20-40	13-27	16-24
*7	10-24	29-48	20-28
*8	20-40	20-43	20-28
*9	6-16	41-63	20-28
10	17-34	25-45	24-32
*11	8-21	37-60	24-32
*12	10-24	41-63	24-32
*13	17-34	37-60	28-37
14	28-49	29-48	32-42
*15	10-28	55-74	32-42
*16	17-34	48-71	32-42
*17	49-71	14-31	32-42
*18	24-43	41-63	32-42
19	24-43	33-55	32-42
*20	28-49	37-60	32-42
*21	24-43	41-63	37-48
22	15-31	63-84	37-48
*23	6-16	71-90	37-48
*24	10-24	68-87	37-48
*25	37-60	29-48	37-48
*26	71-86	14-31	42-55
27	28-49	55-74	42-55
*28	32-54	60-80	48-62
29	37-60	48-71	48-62
*30	32-54	55-75	48-62
*31	28-49	68-87	48-62
*32	49-71	48-71	55-68
*33	37-60	63-84	55-68
34	32-54	63-84	55-68
35	54-75	48-71	55-68
36	32-54	68-87	55-68
37	12-35	94-99.2	55-68
*38	37-60	68-87	58-68
39	49-71	68-87	62-74
*40	37-60	68-87	62-74
*41	60-78	45-68	62-74
*42	83-92	25-45	62-74
*43	49-71	60-80	62-74

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APPENDIX C (Cont'd)

<u>STUDENT</u>	<u>VERBAL PERCENTILE BAND</u>	<u>QUANTITATIVE PERCENTILE BAND</u>	<u>TOTAL SCORE PERCENTILE BAND</u>
44	78-91	41-63	68-80
*45	32-54	85-94	68-80
*46	96-99	68-87	68-80
*47	54-75	68-87	68-80
48	49-71	55-74	68-80
49	49-71	71-90	68-80
50	78-91	41-63	74-84
*51	54-75	74-91	74-84
52	49-71	82-92	74-84
53	54-75	92-99	80-87
*54	54-75	85-94	80-87
*55	54-75	88-96	80-87
*56	60-78	74-91	80-87
*57	54-75	82-92	80-87
58	54-75	88-96	80-87
59	91-95	45-68	84-89
*60	78-91	63-84	84-89
61	83-92	63-84	84-89
62	93-96	71-90	84-89
*63	60-78	85-94	88-89
64	75-84	85-94	87-92
*65	75-89	71-90	87-92
66	66-83	94-99.2	87-92
*67	60-78	94-99.2	87-92
68	66-83	94-99.2	87-92
*69	86-93	63-84	87-92
70	75-89	85-94	89-93
*71	83-92	74-91	89-93
72	75-89	92-99	89-93
73	83-92	71-90	89-93
74	93-96	94-99.2	89-93
75	83-92	82-92	89-93
76	89-94	63-84	89-93
77	86-93	74-91	92-94
*78	86-93	74-91	92-94
79	75-89	94-99.2	92-94
*80	89-94	85-94	83-96
81	86-93	88-96	93-96
82	78-91	94-99.2	93-96
83	89-94	82-92	93-96
*84	86-93	85-94	93-96
*85	83-92	94-92.2	94-97
*86	86-93	94-99.2	94-97
*87	91-95	92-99	96-98
*88	89-94	92-99	96-98
*89	91-95	88-96	96-98
90	93-96	99-99.7	98-99.1
91	96-99	92-99	98-99.1
92	99.2-99.8	88-96	99-99.3

* Sophomores taking the SCAT

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APPENDIX D

"OPERATION FUTURE" SAMPLE PROGRAM

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APPENDIX D - SAMPLE PROGRAM

STATE DEPARTMENT OF EDUCATION
Guidance and Personnel Services
Santa Fe, New Mexico

"O P E R A T I O N F U T U R E"

SOPHOMORE SCHEDULE

February, 1961

FRIDAY

Morning Session -- All Students

8:30 - 9:30	Orientation Meeting	(Counselors to Students)
9:30 - 10:15	English Essay Test	(Sophomores and Juniors)
10:30 - 11:30	Watson-Glaser Test of Critical Thinking	
11:30 - 12:00	Programming of Students	(Each counselor will program students assigned to him)
12:00 - 1:15	LUNCH	

Afternoon Session - As indicated

	<u>Individual Students</u>	<u>Group Programs</u>
1:15 - 2:30	Interviews	PROGRAM: <u>What College Holds in Store for You, Tours of the Campus, Class Visitation</u>
2:45 - 3:40	Interviews	PROGRAM: <u>Career Information, Tours of the Campus, Class Visitation</u>
3:45 - 5:00	Interviews	PROGRAM: <u>Government & Foreign Service Careers, Tours of the Campus, Class Visitation</u>
<u>Evening</u>		MOVIES

SATURDAY

Morning Session -- As Indicated

	<u>Individual Students</u>	<u>Group Programs</u>
8:30 - 9:10		GENERAL SESSION
9:15 - 10:25	Interviews and Test Interpretation	PROGRAM: <u>Scholarship Information, What College Holds in Store for You</u>
10:30 - 1:00	Interviews and Test Interpretation	